1: Longrigg G-4, 5 (ca. 1915-1940) MH1 Iraq MH1

312 work on the new Barrage began. Tenders for the complete con-
185 struction were called for in September 1910, and the contract
653 awarded to the British firm of Sir John Jackson & Co.

The construction of the Barrage, then and now one of the greatest works in 'Iraq, was carried out with extraordinary speed by a staff which included Turks, Indians, Armenians, and some 3,500 'Iraqis. The suspicion of certain elements in Turkish officialdom usually turned to gratified encouragement after a personal visit to Hindiya. Labour troubles were few. Transport, especially that on the Euphrates routes from Baṣra, presented extreme difficulties, with tribal blackmail and navigational obstacles; and the continual struggles needed to obtain funds from an empty Treasury in Istanbul and a harassed Daftardar in Baghdad were successful only after actual stoppage of the work seemed inevitable. The iron gates arrived in the late summer of 1913, and a crowded and triumphant ceremonial opening of the whole work was held in November of that year. Although the Barrage, which had cost less than £500,000, still lacked the canalization which it was designed to support downstream, it conferred immediately enormous benefits on the countryside which it served. These would have been a hundredfold greater if they could have included public security, an equitable land system, and some hope of new agricultural methods.

Elsewhere in 'Iraq, much of the earth-work of the Ḥabbaniya Escape in its first phase was completed, and digging of the Ṣaqlawiya Canal was begun but abandoned. Further surveys produced information of great future value, though no other major enterprise belongs to this period. A scheme for watering the Ḥawija, north-west of Kirkuk, from the Lesser Zab was begun without study and ended in fiasco and scandal. More important, and prophetic of a major development of the future, was the growing riverside use of oil engines for irrigation purposes. These increased from a mere dozen in 1900 to some scores in 1914. Meanwhile, flood-bank protection annually renewed followed its unsure and expensive course, rarely effective and always burdensome. The 'bunds' built by Nadhim Pasha for the safeguarding of Baghdad, though they failed partially in their first year, were an important work.

433 These last years of Turkish rule were marked by little industrial development. Some increase in local shipbuilding and the use of irrigation pumps, ice machines, wool and liquorice-presses called for the first time for mechanical repair facilities. The first motor-
●494 car appeared in 'Iraq in 1908 from Aleppo; by 1914 less than a dozen were in use. These included a motor-bus service on the Ba'quba road, and the private cars of a few notables. Efforts to mechanize the Kufa tramway had failed.

1: Longrigg G-4, 5 (ca. 1915-1940) MH1 Iraq MH1

farmed it with improved techniques; and an 'Iraqi-Syrian group, that of the 'Asfar concession', signed with Government in 1924 an ambitious land-development and irrigation agreement, involving the construction of the Habbaniya reservoir, a Faluja barrage, and a dam on the Diyalā. Limited cotton-planting without notable success was carried out in 1925 by an Asfar affiliate, Diyala Cotton Plantations; but the terms of the main concession were soon afterwards called in question by popular outcry, its semi-monopolist nature was revealed, and the whole enterprise was perforce reconsidered.

Meanwhile, a Government anti-locust organization, on the scale which this ruinous pest demanded and using every known method, came into being in northern 'Iraq while Government participated in interstatal plans jointly established in Damascus. The deplorable harvest of 1924, the result of excessive cold and rainlessness, was a reminder of the precariousness of agriculture. The small Veterinary Department under Chadwick, besides its work with Army and Police horses and its civil animal hospitals, did what it could to control the endemic and epidemic diseases of the 'Iraqi flocks and herds, especially rinderpest which caused great annual losses.

Roads, mechanical installations, and buildings were the responsibility of the Public Works Department, of which the Directorship was passed by J. M. Wilson, in that office since 1920, to A. S. Clay in 1925. Roads were still at this period unsurfaced and deep in mud or dust, but constant care kept them somehow open. The mileage of road and track available for wheeled transport increased threefold, and hundreds of passenger and freight-carrying cars plied on every route. The care of these, with their accompanying repair shops, supplies, and dealers formed a new branch as much of industry as of travel. A trans-desert motor route, passing by Ramadi and Ruṭba to Damascus and the Levant, was inaugurated in 1923 by two New Zealanders, the Nairn brothers, whose headquarters was at Damascus. It had immediate effect on 'Iraq's foreign orientation. The service in 1926 absorbed its first (Syrian) competitor, which, using a track by Hit and Palmyra, had been the victim in 1925 of a savage attack by Dulaym tribesmen. The Ruṭba–Damascus section of the Nairn route became unusable in the summer of 1925 by reason of the Druse rebellion, and for a year thereafter convoys were diverted to 'Amman and Haifa through the forbidding lava country of Transjordan. The carriage of mails by the desert motor route became usual, until air-mail services superseded it. Postal arrangements within 'Iraq, now under 'Iraqi administration with British expert advice, grew more comprehensive and included all normal post office services. Telegraphs were

1: Longrigg G-4, 5 (ca. 1915-1940) MH1 Iraq MH1

the passing of British influence would lead back to the greater freedom of Turkish times.

It was by grace of the relative security of the countryside that archaeological fieldwork could proceed as it did in many tribal areas. The Department of Antiquities, with its improved Museum, was able to form a collection of recovered treasures from 'Iraqi soil which was soon to be among the finest in the world for Sumerian, Babylonian, and Assyrian history. It was increased by the devoted labour, pursued in safety though amid total popular incomprehension, of learned expeditions at Ur, near Naṣiriya: at Kish, near Ḥilla: at Khorsabad, Koyunjik, and Nineveh near Mosul: at Tirkalan by Kirkuk: at Ctesiphon, south of Baghdad: at Warqa, Lagash, Tall Lu', and Tall Billi in central 'Iraq: at Samarrā, and on the lower Diyalā. These many excavations were the work of British, American, German, and French universities and learned bodies, represented locally by scholars of high repute, and co-ordinated by the Department of Antiquities. Apart from their value to the cause of scholarship and their enrichment of 'Iraq's visible assets, the expeditions enhanced the country's prestige, with an immediate harvest of goodwill and tourist traffic. Efforts were made to interest Government in stopping illicit traffic in stolen antiquities: a task not aided by patriot press denunciations of the 'exploitation' of 'Iraq's ancient sites by 'foreign companies'. A British School of Archaeology in 'Iraq was founded in 1929 as a memorial to Miss Gertrude Bell.

6. COMMUNICATIONS AND DEVELOPMENT

The Baghdad–Damascus desert motor route was steadily developed during the later nineteen-twenties. The Nairn–Eastern Company, amalgamated thus in 1925, survived the appearance and early failure of local rivals, improved its services, and evolved specially designed vehicles: King Faysal himself christened their giant 'six-wheelers' in 1927. A mid-desert fort and rest-house at Ruṭba, with its police post and wireless station, was constructed in the same year. On no more than one or two occasions, though notably in 1928, were desert convoys interrupted by bedouin raiders.

Other highway developments of the period were considerable, as the increasing volume of wheeled road traffic demanded; motor vehicles had increased from a few dozen in 1920 to 3,500 private cars and 1,000 lorries in 1930. But the quality of roads did not improve as did their mileage, in spite of increased use of road-making machinery, and only short sections were, for the first time, metalled and bitumen-surfaced. By 1930 not more than 170 miles, of a total of 4,500, had been thus improved. Certain railway bridges

1: Longrigg G-4, 5 (ca. 1915-1940) MH1 Iraq MH1

were decked for road traffic, passable tracks were pushed far into the Kurdish hills. A 900-foot steel bridge over the Euphrates at Faluja was begun by British contractors, Messrs. Balfour, Beatty & Co., in 1927 and, after interruption by floods and a law case, completed in 1932. Permanent steel bridges across the Tigris at Baghdad and at Mosul were planned, and the latter well begun in 1932. A significant project was the road begun in 1927, and after remarkable engineering feats completed five years later, to connect the 'Iraqi system at Arbil with that of Adharbayjan at Tabriz. The 'Iraqi section, first used by experimental convoys in 1931, passed through the fabulous Rawanduz Gorge and was completed by the Persian section to the shores of Lake Urmiya; but its power to divert the Tabriz trade from Batum or Trebizond to Baghdad was doubtful. The close of the period saw the increased use of a direct Baghdad–'Amman route, and the first experiments in developing a pilgrim highway from Najf to Madina.

The Tigris steamers operated by the Lynch Company and their local competitors doubtfully held their own against rail, air, and road competition, and had little scope for development. The veteran *Blosse Lynch* and the *Baghdad* were sold as scrap in 1927, *Mejidieh* in 1928, and two R.A.F.-owned steamers, the *S.*16 and *S.*14 were acquired in 1927 by the Euphrates Company, to be renamed *Blosse Lynch* and *Mejidieh*; they were joined by the *Tigris* in the same year. The *Zobaida* ceased to be in commission after 1929. At Basra Port the bar-dredging operations at Fao, provisionally completed in 1926, were carried further in 1928–30. They resulted in a dredged channel—the Rooka—giving 30 instead of 28 feet of water at high tide (as compared with 20 feet in 1920) and easier movement over the inner bar. The bulk of the Port traffic consisted, as ever, of oil tankers proceeding to and from Abadan, but the Shatt was used regularly also by the Strick, British India, City, and other British lines, by the (German) Hansa Line and by an occasional ship of the U.S.S.R. or of Sweden. The new Port headquarters ranked among 'Iraq's most imposing buildings. The dredging loan of £460,000 from the Anglo-Persian had soon been repaid, and substitution of 'Iraqi for British and Indian personnel continued. Colonel Ward's Port administration, grouped as a department under Finance, was normally prosperous though badly afflicted by the slump of the years 1929 to 1932. It continued to pay to Great Britain the annual instalments fixed in 1922 as the cost of acquisition, but formation of the Port Trust then envisaged, and again provided in the 1930 Treaty, was not yet in sight.

The history of 'Iraq Railways was at this period uneventful. Their status as between British ownership and 'Iraq Government

1: Longrigg G-4, 5 (ca. 1915-1940) MH1 Iraq MH1

opening at Kirkuk in January 1935, its twin 12-inch pipelines to Haifa and Tripoli came into operation. This achievement marked the end of ten years of patient and well-directed work since the grant of the first concession, and by its employment of 'Iraqis in their thousands, its expansion of communications and the example which it offered of successful large-scale modern industry, it added great advantages for the 'Iraqi public to the direct enrichment of their Treasury. The gradually developing works in Kirkuk oilfields, the main depots at Bayji and Haditha, the mid-desert pump-station townships with their connecting roads, pipeline, and telegraphs became a characteristic feature of the modern 'Iraqi scene, while its production, of 4 million tons of crude oil a year from 1935 onwards, placed the country immediately as the eighth oil-producing country of the world. The B.O.D. Company, whose shareholding was in these years predominantly Italian, German, and Franco-Swiss, soon found itself embarrassed by its obligation of annual payment to Government, and by its failure, in spite of an active drilling campaign from 1933 onwards, to discover other than viscous, scarcely marketable oil. The Company's plan in 1935 of diminishing their cash payments by building a Qaiyara–Tall Kochek railway, which could convey their oil to seaboard and link 'Iraq with the Turkish railway system, was after hesitation rejected by Government. Their financial position grew desperate, and a reconstruction of their Board in 1936 marked the transfer of control of the Company to the I.P.C. group; and the latter emerged soon afterwards as outright owners of the B.O.D. and Mosul Oil Fields, with the disappearance of all non-British shareholding in it other than that of the I.P.C., French, and American constituents themselves. The problem of its viscous and sulphurous oil remained to be solved. The smaller Rafidain and Khaniqin Companies (p. 211) continued respectively their work of producing and refining oil in the Transferred Territories, and of marketing it throughout 'Iraq. The project of a Government-owned refinery, for which the I.P.C. concession provided, was conceived during this period but was to prove slow of realization. Road-surfacing was among the uses of oil products in 'Iraq, but neither this nor the too limited funds available could do much at present to provide the country with roads of high or even tolerable standard. Some further sections such as that from Ramadi to Ruṭba were metalled, others were indifferently or barely maintained, all were at worst passable; road maintenance, costly and inconspicuous, was given habitually a low priority in Government allotments. Traffic on the Najf–Madina route increased. The route from the Euphrates to 'Amman and Haifa developed as a powerful rival of the northern track to Beirut. The Rawanduz road, dis-

1: Longrigg G-4, 5 (ca. 1915-1940) MH1 Iraq MH1

appointingly, carried little traffic other than some oil supplies to northern Persia. Following completion of the great Faluja bridge (p. 208) other steel bridges were constructed: on the Lesser Zab at Altun Kupri, the Greater Zab at Aski Kellek, and elsewhere. In Baghdad the replacement of the two pontoon crossings by permanent steel bridges was at last decided, and contracts were awarded to Messrs. Holloway Bros. in 1936, a major step in the development of the capital. The new spans of the Mosul bridge were finished. Municipal street-making proceeded everywhere, and not least in Baghdad.

Little changed in the field of Tigris river navigation. Fears that the Kut barrage would make steamship navigation impossible were aroused but could be allayed; a move made in 1934 by local rivals to question the rights of the Euphrates and Tigris Company led to nothing. River traffic on the whole diminished. The *Zobaida* was sold to India in 1935, the *Blosse Lynch* and *Tigris* as scrap in the same year and the *Khalifa* in 1937. In 1936 the Mesopotamia–Persia Corporation split again into its original components, the Lynch Company and Messrs. Gray Mackenzie. Four small gunboats were acquired by Government in 1937 for riverain police work, but were little used. The Port of Baṣra rendered steady service to the country. Its volume of traffic permitted it to pay regularly its capital instalments to the British Government, and by 1937 a debt of only £300,000 remained. The Port Trust, to be set up under the 1930 Treaty, did not appear; the Port was still administered by a Directorate under the Ministry of Finance. Its bar-dredging scheme operated with great success, repaid its loans, and kept open and improved the deep channel.[1] Two new dredgers were acquired. The Port administration completed a modern airport at Baṣra, furnished with a hotel and all facilities, and provided Baṣra city and suburbs with electric power and a modern water-supply. The ocean traffic using the Port increased substantially after 1935: first two, and later four, Japanese lines appeared, with one each of German, Indian, and Italian ownership and an occasional Russian, Swedish, and Greek steamer. The great bulk of the tonnage remained, as of old, British and British-Indian.

The 'Iraq Railways maintained their solvency and functions in spite of tribal interference, fluctuating traffic, largely obsolescent equipment, and serious road competition. The operation of the system was modernized as far as was practicable, and a rapid Baghdad–Baṣra daily service introduced. Negotiations with the

[1] The low-water depths in the Rooka channel (p. 208), achieved by successive phases of the bar-dredging scheme, were in 1926, 18 ft., in 1928–9, 20ft., in 1935–8, 23 or 24 ft.

lr Longrigg G-4, 5 (ca. 1915-1940) MH1 Iraq MH1

The Lynch fleet had been diminished in 1938 by the loss of the *Mejidieh*, sold to Anglo-Iranian, and in 1941 by that of the *Malamir* and the *al-Kadri*, burnt out and scrapped respectively. Their rivals, notably Ḥannā al-Shaykh and 'Abd al-Karim Khudhayri (Khedery), were more than holding their own: but the competition of the railway and the roads must grow rather than diminish. To the road system, indeed, Paiforce contributed much, notably in the completed trans-desert highway to Jordan, in the re-surfacing of many road stretches, and in the maintenance in being of 'Iraqi transport fleets by the provision of tyres. Nevertheless, the upkeep of civil motor vehicles in war-time proved most difficult, and the numbers in use decreased. The air communications of the territory were not improved during the war; but before its end projects for a national air line were under formation. The European services crossing and visiting 'Iraq recommenced in 1945 after war-time curtailments, and the Egyptian Misr Airways restarted its Cairo–Baghdad service. A contract was given in 1945 to the Marconi Company for the erection of a new wireless transmitting station.

The course of foreign trade was notably deflected from its usual channels by the war. In 1939 the United Kingdom was its principal customer, followed by the United States, each of these countries taking approximately one-third of the total visible exports; but by 1944 the principal buyer was Palestine with Transjordan, followed by Persia. Visible exports, amounting to ID 4 million before the war, reached through enhanced prices ID 9 million before its end. The transit trade, reduced in 1939 to a value of some ID 3 million, reached ID 13 million five years later, thanks to the passage of goods to Russia. Imports rose from a value of ID 9 million before the war to ID 14 million in its last year; the United Kingdom's share in these fell from 33 to 11 per cent., that of Japan from 18 per cent. to nothing, while India's share rose from 8 to 30 per cent., Syria's from 2 to 16, the United States' from 8 to 12.

The desire for industrial expansion, always a cherished ambition, was stimulated by the war-time shortages and an increased local market; contrary factors were the shortage of raw materials, competition for skilled workers, and the impossibility of importing factory equipment. Of the seventy enterprises benefiting in 1944 from the law of 1929 most were on the humblest scale, with the importance only of pilot projects which could indicate to the middle class the possibility of a career outside Government service, the professions, or politics. Some war-time progress was made in brick manufacture; workshops produced hand-tools from scrap metal; the crushing of oil-seeds—cotton, sesame, and linseed—

7: International Bank N. S-4 (1951) 1952 MH1 Iraq MH1

be necessary. Such a program will need to be coordinated particularly with the development of new agricultural areas. Earth excavated in the construction of new irrigation and drainage canals can be used in the building of such roads. The surfaced roads should be constructed by contractors of repute capable of furnishing their own road-making plant. It is generally recognized that the Baghdad-Kut-Amara-Basra and the Baghdad-Kirkuk-Erbil-Mosul roads should have first priority. The first of these is at present only a dirt road but the latter has sections which are already surfaced.

As road transport develops, it will be vital to institute some controls, particularly since most of the operators now provide only irregular and unreliable service. Limitations on loads and regular inspection of vehicles should be instituted and enforced. Operators of transport services should be licensed to make sure that they are equipped to provide adequate and reliable service at reasonable rates and that they carry insurance.

The Mission has also given some attention to the municipal bus service in Baghdad. Operations at present are seriously handicapped by the diversity and age of its transport equipment and high maintenance costs. A sound decision has been made to standardize equipment. The central workshop should also be modernized and re-equipped and a central garage and four auxiliary garages provided. To carry out this program financial assistance from the Development Board will be necessary. It is also suggested that more efficient management of municipal transport might be achieved through the appointment of a single Director General in place of the present Board, and that a stricter control over the collection of passenger fares be instituted to improve revenues.

Communications

For communications, capital outlays will be required primarily in connection with the extension of the telephone system. The needs are well-known in Iraq and do not require elaboration here. Although the communications services are operated at a profit which is credited to the government budget, it is suggested that future capital expenditures be financed by the Development Board. This will not only make it easier to balance the government budget, but will enable the Board to insist on better synchronization of the

7: International Bank N. S-4 (1951) 1952 MH1 Iraq MH1

Petroleum products are distributed by the Rafidain Oil Company, a subsidiary of the Anglo-Iranian Oil Company, and at prices, exclusive of taxes, which are among the lowest in the world.

TABLE 8

PRODUCTION OF PETROLEUM AND REFINED PRODUCTS
(in thousand metric tons)

	1947	1948	1949	1950	1951 (est'd.)
Crude oil					
Iraq Petroleum Company	4,354	3,017	3,671	5,986	7,500
Khanaqin Oil Company	339	367	365	384	350
Total	4,639	3,384	4,036	6,370	7,850
Refined products	n.a.	373	369	393	—

VI. Transport

The state-owned railway system is the principal means of transport, carrying about 2,000,000 tons of cargo and over 3,000,000 passengers annually. Part of it is standard and part meter gauge. The standard-gauge section is part of the original Berlin-Baghdad railway and runs from Baghdad northward via Mosul into Syria and Turkey. The meter-gauge line extends from the Port of Basra in the South to Baghdad and then beyond to Kirkuk and Erbil in the North, with a branch line to Khanaqin. Over recent years the railways have managed to carry out a considerable capital development program despite serious financial obstacles, but they now face the need of replacing, on a considerable scale, old track, rolling stock and locomotives.

Road transport has as yet primarily supplemented rather than replaced railway traffic. There are only about 11,000 passenger cars and a little over 9,000 trucks and buses in the country. Roads are generally inadequate. There are only about 2,500 kilometers of metalled and surfaced roads in all of Iraq. The remaining dirt roads quickly become impassable in bad weather. Some important

7: International Bank N, S-4 (1951) 1952 MH1 Iraq MH1

centers such as Amara and Kut are linked neither by rail nor by all-weather roads to Basra and Baghdad.

In Basra, Iraq possesses an excellent port capable of handling a considerable increase in traffic. Upcountry cargo into and out of the port is handled almost wholly by railway, for inland river traffic has declined greatly in importance owing to shallow water and other impediments to navigation.

The port and the railways are each run by an autonomous administration operating under a separate budget.

VII. Money and Banking

The banking system consists of the National Bank, five commercial banks, a number of private banks or *sarrafs*, the post office savings bank, and three state-owned longer-term financing institutions, the Industrial Bank, the Agricultural Bank and the Mortgage Bank.

The National Bank succeeded the Iraq Currency Board as the currency-issuing authority in 1949. Iraq is a member of the sterling area, so that its currency is backed principally by sterling assets in London. Although the law permits the currency to be backed up to 30 percent by Iraqi government securities, as of March 31, 1951, the total amount of currency in circulation was more than covered by sterling assets. Aside from its note-issuing function, the Bank is charged with the administration of foreign exchange control and the supervision of the banking system in accordance with a bank control law which became effective at the beginning of 1950. This law requires banks to keep the equivalent of 15 percent of their time and demand deposits as a reserve with the National Bank and to keep 50 percent of these deposits in the form of cash and investments in Iraq. The National Bank is empowered to reduce the reserve requirement to 10 percent and to vary the second between 30 and 70 percent. Since the commercial banks have had no need for recourse to the National Bank in order to replenish their cash resources, the Bank's loans and advances have remained very small. As of March 31, 1951, they

7: International Bank N, S-4 (1951) 1952 MH1 Iraq MH1

the work in the future. The work should be carried out by contractors of repute. Since they will generally possess the appropriate plant, it should not be necessary for the government to purchase any large amount of roadbuilding machinery.

Traffic

Road traffic is still extremely light in the country. As Table 6 indicates, the number of motor vehicles operating in Iraq is still very modest, and of this number most operate in or around the large cities. The personal observation of Mission members confirms that traffic density even on the most travelled roads is very low.

TABLE 6

REGISTERED MOTOR VEHICLES

Year	Passenger Cars	Buses	Trucks	Motorcycles
1942	4,522	n.a.	1,942	82
1943	4,333	n.a.	1,900	100
1944	3,972	n.a.	1,720	116
1945	3,771	n.a.	2,017	127
1946	5,902	n.a.	3,497	524
1947	7,422	n.a.	5,136	1,015
1948	8,678	n.a.	6,088	577
1949	9,601	n.a.	7,262	1,029
1950	11,438	3,007	6,381	1,636

n.a.—not available.

Road Usage

The improvement and construction of roads will undoubtedly bring about a rapid increase in road traffic in the future. It will then become necessary to regulate the usage of the roads. At present both the condition of the vehicles using the roads and their loading can only be described as extremely dangerous. On the many tours made on Iraq's existing roads, far too many of the very few vehicles seen on the roads were observed to be overloaded both with respect to the weight and to the height of the load. Top-heavy vehicles are particularly dangerous, especially on the sharply curved roads in mountains and gorges. Many bridges have been heightened—often in a way which is unsound structurally—to accommodate such vehicles. Vehicles unfit to operate endanger the safety

?: International Bank N, S-4 (1951) 1952 MH1 Iraq MH1

of all road users as well as their passengers and cargoes. The expectation of increased road traffic makes it imperative that appropriate measures of control be devised without delay.

The following measures are suggested for adoption:

1. Construction of road weighbridges at suitable check points.
2. Compulsory inspection of all vehicles carrying passengers for payment and of all trucks before a periodic license is issued.
3. Appointment of qualified inspectors with sufficient authority and responsibility to ensure adequate enforcement of vehicle regulations.

With the development of traffic on the new highways it will be necessary to introduce and enforce proper traffic rules and regulations. The Mission, therefore, recommends that a highway code be drawn up and that traffic police be instructed and trained in the application and enforcement of the code.

Traffic conditions in the capital are at certain times of the day chaotic, even though city traffic is by no means dense. It would appear that, with training, the formidable force of traffic police now regulating the city's traffic could without expansion serve for traffic control on the country's highway system as well. It would pay the government to engage the services of a traffic expert, preferably from a metropolitan police such as London's, for a limited period, to design the highway code and to instruct the traffic police.

Public Road Transport

It will become increasingly necessary to regulate public road transport of passengers and goods by a licensing system. If this transport is left entirely free and uncontrolled, chaos will be the result; too many operators are likely to engage in public transport, run their services on borrowed money, find their vehicles run down before the loans are repaid and end in bankruptcy. The country's economy will suffer both from the waste of resources involved in such uneconomic ventures and from the probable need of protecting the railways by subsidies from the consequences of such wasteful operations. A reasonable number of capable private operators should provide healthy competition among themselves and with the railway.

7: International Bank N. S-4 (1951) 1952 MH1 Iraq MH1

Transport licenses should be granted only if the proposed operator appears responsible and sufficiently well equipped to perform the transport services and if there is evidence of present or prospective need. Operators should be required to take out insurance, to adhere to published rates, routes and schedules, and to conform to loading regulations.

Maintenance

The maintenance of the new road system when once completed is even more important than its initial construction. Service and funds must be assured to keep the roads in the condition in which they have been built. The Minister of Finance should budget for annual expenditures, to be estimated by the Public Works Department, for maintenance of the road systems and all accessories including sign posting, for improvements necessitated by increased traffic, for inspection and control of road traffic and for the traffic police required. The expenditures should, in general, be covered by revenue from those who actually use the roads.

Subsidiary Roads and Urban Streets

It is recommended that at the earliest opportunity a system of cooperation between the Public Works Department and provincial and municipal road departments be established to bring maintenance, traffic control and municipal licensing in line with the government's policy in these matters and that appropriate provision for this cooperation be made in the budget.

City Transport

An essential part of the country's transport system is passenger transport service in the capital. Baghdad and its suburbs form a city of a population of over half a million spread over an area with a radius of four to eight miles. In 1938 it was decided to establish a municipal passenger service to be operated with buses. The war intervened and limited services were brought into operation in 1942 with converted army trucks equipped with locally built bodies. A loan of ID 500,000 was raised, more vehicles purchased and workshops and garages of sorts installed. The services deteriorated with the poor equipment, which was all that was available in wartime, and the municipality was unable to carry the financial burden. Early in 1950 the service was taken over by

493 The country's rolling-stock (horse-drawn and motor vehicles), excluding military and other official vehicles, is increasing, as the following statistics show:

	1946	1947
Horse-drawn vehicles:		
Carts	936	
Wagons	459	
Motor vehicles:		
Passenger cars	5,903	7,422
Vans and omnibuses	3,497	5,136

An order for 100 new medium-sized omnibuses was placed in the United States in 1949.

The use of motor lorries is becoming increasingly wide-spread and this method of transport is setting up serious competition with the Iraqi railways.

494 Road passenger traffic, especially from Baghdad to the Hashimite Kingdom of the Jordan and beyond, is carried by large omnibuses with regular schedules.

3:Royal Institute of International Affairs U-4 (no date)1954 M1 Middle East
Iraq MM1

491 the main roads Baghdad–Kut–Amara–Basra and Baghdad–Kirkuk–Irbil–Mosul, which are at present unmetalled or only partially metalled. The Development Board has allocated nearly ID27 million to these projects.

493 494 Road traffic is light. At the beginning of 1953 the number of registered motor vehicles was given as follows, most of them operating in or around the larger towns: private cars 8,000; taxis 3,500; buses 2,900; lorries 6,500; motor cycles 1,900. In Baghdad an efficient bus service is operated by a State Passenger Transport Board. A private cross-desert bus service links Baghdad with Damascus, and there are private bus services between Iraq and Persia.

504 505 *Basra Port*,[1] lying some eighty miles up the Shatt al-Arab from the Persian Gulf, is the only commercial port of Iraq; an oil port is being constructed at Fao, near the mouth of the Shatt. A small port established during the Second World War at Umm Qasr, on a sea inlet south of the Shatt al-Arab entrance, has since been dismantled. The authority of the Port, which is controlled by a special department of the Iraq Government, extends from the outer bar of the Shatt to a point seventeen miles above the town of Basra. The Shatt is sufficiently deep to admit large ocean-going vessels, but the Fao bar at its mouth requires constant dredging to clear an entrance for the larger of them. During the Second World War extensions were carried out in view of the increased volume of traffic; in consequence there are now 4,500 feet of continuous jetty, providing berthing for eight large vessels at a time and two or three smaller ones, in addition to barge and lighterage berths. Basra Port handles a large proportion of the country's trade. During 1952 some 400 ocean-going vessels, with a net registered tonnage of 1,132,000, and some 260 tankers and water-carriers, with a net registered tonnage of 927,000, were handled by the Port Authority in Basra, Fao, Abadan, and Khorramshahr. During the financial year 1951–2 cargo imported at Basra totalled 511,600 tons and cargo exported 800,000 tons. The closure of Abadan has occasioned the Port a severe loss of revenue, estimated at ID100,000 a month; port and dredging facilities have nevertheless been maintained.

[651]

502 *Inland Waterways*. The Tigris between Basra and Baghdad is navigable for vessels of up to four feet draught from February to August except for short flood periods in April and May in some years; during the remaining five months navigation is impeded for long periods. Inland water transport has lost much of its former importance. The last remaining regular navigation

[1] See *Port of Basrah*, official publication of the Port Authority.